

On report of the respective Committees, the following papers were ordered to be published :

Observations on American FOSSILS, with descriptions of two new species.

BY T. A. CONRAD.

Prof. Cook, of New Brunswick, N. J., has lately received a few fossils from Ocala, Florida, which prove the limestone of that locality to be of the same age as the Shark River marl of New Jersey. The species consist of *Globulus alveatus*, Con., *Venericardia prima*, Con., *Dosiniopsis alta*, Con. These are all Eocene species of California, Maryland and New Jersey. In this rock no doubt occurs *Carcharodon angustidens*, Agass., of which I obtained a specimen at Tampa Bay, Florida.

Among Prof. Cook's fossils are a few species from Jasper Co. Miss. The rock of this county, in which the fossils occur, is stated by Hilgard to be of the Jackson Group, (Upper Eocene.) The species are *Ostrea Tuomeyi*, Con., *Mortonia turgida*, Con., *Pecten Poulsoni*, Morton, *P. perplanus*, Morton, *Carcharodon angustidens*, Agass., *Orbitolites Mantelli*, Morton. The former of these I suppose to be the shell which Tuomey found so common in the *Basilosaurus* limestone of Alabama, and which he referred to *Pycnodonta vesicularis* (*Gryphaea mutabilis*, Morton.) It is very different, however, and may be distinguished by the following characters :

*OSTREA TUOMEYI*.—Ovate, sublobate, lower valve deep, umbo narrow, rough and unequal in surface, with rough lines of growth; not distinctly plicate; upper valve convex above, slightly convex below; with a rough and unequal surface; concentric lamination very prominent, when weathered.

It differs from *P. vesicularis* especially in wanting the inner plications about the upper submargins of the interior, and the umbo is much narrower; it is also a true *Ostrea*, whilst the *vesicularis* is the type of the genus *Pycnodonta*, Fischer, and characterizes the cretaceous era.

*Echinodermata.*

MORTONIA, Desor.

*MORTONIA TURGIDA*.—Suboval or subpentagonal, swelling medially, with a convex outline; thin on the submarginal portion of the disc; ambulacra elliptical.

Allied to *M. Rogersi*, but larger, thinner round the central prominence, more elevated medially, the depression about the mouth greater, and the anus smaller. It bears about the same relation to *Rogersi* as *Sismendia alta*, Con., bears to *S. Lyelli*, Con.

*Testacea.*

LIODERMA, Conrad.

*VOLUTILITHES LIODERMA*.—This shell has not the characters of *Volutilithes*, but is covered entirely by enamel, has very oblique columnellar folds, and an outer lip somewhat emarginate on the upper part to its juncture with the body whorl; base deeply emarginate.

I have not met with this genus in any American Eocene bed.

SOLENA, Browne.

Subgenus LEPTOSOLEN, Conrad.

*SOLENA BPLICATA* (SILQUARIA) Con.—Cretaceous.